L3 organization of jet/met group

Physics Objects & HLT: Sasha Nikitenko

Detector Simulation: not filled

Detector Reconstruction & Testbeam: Salavat Abdullin

Calibration: Olga Kodolova

Status

Production: our main goals for the fall 2000 production was to provide samples with tracking information to taus stdies (Sasha), and to add the qthat information to the hlt samples for MET rate studies (Pal).

We have enough data for Sasha to make good progress on his work. We do not yet have enough for Pal to do useful work on MET rate calculations.

Pal has begun producing the ntuples.

Jets

lost Silvia to the muon group (lucky Silvia). Note on her work is available.

Andrei Krokhotine has agreed to provide jet energy calibrations for new versions of CMSIM/ORCA. He has produced these calibrations for the Fall 2000 production. Andrei still owes us a note on his studies on getting rid of fake jets at L1. He has started work on getting rid of fake jets offline. We lose Andrei in June to Dzero.

Olga and Irina have done work on optimizing the weights for energies from the various depth segmentations of the calorimeter for jet reconstruction. need to document, and get into ORCA. gives a small improvement in jet resolutions.

MET

results using only minimum bias simulation available in a note.

Pal is waiting to get enough fall 2000 hlt sample to update his results.

taus

as always, going well! Sasha has a L3 algorithm using the pixel detectors that gives a factor 10 rejection with 76% efficiency. Is working on L4 algorithms now.

ORCA

Salavat has added a realistic simulation of the HCAL ADC to ORCA. Has worked on tools to help us assess the contribution to the resolution of various factors. Has altered the code so that it uses the GEANT hit time information.

Calibrations

Olga has begun the organization of the group. There is a large effort on HF calibrations. But, not much on HB/HE. We need to figure out how to change this.

Simulation of HCAL

hmmm.....